

# Super ActivO™

# User Manual

for Europe

2014



*Environmentally activated by*



# **User Manual**

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## **UNPACKING**

**Ⓔ** Open top flaps of carton. Gently place carton on its side.  
Lift unit up slightly and then pull out by rolling on its wheels.

- Place handle on top panel and fasten 3 hex screws on each side.



← **Handle**

← **Front  
Grill Panel**



## 1. General Information

Ecozone's **Super ActivO** is a mobile and easy-to-use deodorizing system for indoor use. This robust, computer controlled and automatic system is characterized by high safety standards. The system incorporates ECOZONE's unique **ADA system**, a double-stage operating cycle that creates ozone and subsequently removes it, allowing the immediate reoccupation of treated spaces.

In the first stage the room is enriched with ozone (generated from the air using Ecozone's multi-patented technology) at a particularly high rate in order to reach homogeneous conditions and a high concentration level within the shortest possible time. In the second stage, any after-treatment residual ozone is decomposed into oxygen, so as to leave the treated room well within the regulated levels.

## 2. Declaration of Conformity

Model No. POCS-500 (POCS= Portable Odour Control System)

This unit fully complies with CE & FCC rules of EMC regulations.

EN 61000-61, EN 61000-62, EN 61010-1, EN 5501 EMC, FCC Part 15

Safety of Low Voltage Directive 73/23/EEC as Amended: EN 61010-1.



## Safety Precautions & Warnings



Read this manual carefully before operating the unit.



Do not expose this equipment to rain or moisture. Should any liquid come into contact with the system, unplug it and have it serviced by qualified personnel before operating it further.



Unplug the system power plug when it is not in use. When unplugging, never pull the plug by the cord itself.



DO NOT enter the treated room during the operation of the system, or before hearing the completion-of-cycle audio alert-signal.



This system is equipped with a ventilation inlet and a ventilation outlet.

DO NOT BLOCK inlet/outlet or place foreign objects in their vicinity which may block air flow. Place unit in the CENTER of the room.



DO NOT disconnect cable cord from mains socket before the operation of the system is completed.



## **AVOID ELECTRICAL SHOCK**

**This unit is supplied with a earthed cable.**

**Attempting to bypass the earth or to connect the unit to an un earthed socket is strictly prohibited.**

**Under no circumstances should the unit be operated with the front panel grill loose or missing.**

**Prior to removing the grill for maintenance, always disconnect the unit from power.**

There are no user serviceable parts inside the Super ActivO; removal of back panel by unauthorized personnel will result in **voiding the WARRANTY!**



### 3. Technical Specifications

#### 5.1 Description

The **Super ActivO** system is a portable high-duty and rugged system. It features the most advanced technology in the field of odour-control and air-treatment. The **Super ActivO** employs Ecozone's state-of-the-art and patented Singlet Unit which is characterized by relatively high activation rate and enhanced reliability.

#### 5.2 Technical Specifications:

**Input Voltage:** 230V; 50Hz

**Air Flow-Rate:** 450 m<sup>3</sup>/h.

**Ozone output:** 12g/h (12,000 mg/h)

**Operation:** Fully Automatic Activation & Deactivation Cycles.

**Cycle time:** Minimum 15 minutes, Maximum 48 hours.

With special input code: 72 hours, ozone generation only

**Control:** Digital keyboard

**Display:** LCD, 16 Digits.

**Safety:** Circuit breaker 5A

Amber Flashing Light Indicator (Super ActivO in operation)

Red Fault Indicator

Buzzer Alarm (operation has begun; operation has ended)

Differential Pressure Regulator (air flow obstructed)

Door Interlock (front panel not closed)

**Dimensions:** 50 x 40 x 100 cm, with handle attached

66 x 53 x 94 cm, packed for shipping, handle detached

**Ozone outlet duct:** 4" diameter

**Weight:** 34 kg; packed for shipment 40 kg

**Enclosure:** Metal and ABS

**Wheels:** leave no tracks

**Low EM Noise.**

**Certification:** CE & FCC



### 5.3 Normal Environmental Conditions:

**Indoor use only**

**Temperature:** -5 °C to 40 °C

**Humidity:** maximum relative humidity: 95%;

*ECOZONE Technologies has a policy of continuous product improvement and reserves the right to modify or change this specification at any time without notice.*



## 4. Operation

### Preparation and Connections

#### **CAUTION**

**OZONE IS A POWERFUL OXIDIZER. USE THIS EQUIPMENT WITH CARE AND IN UNINHABITED AREAS ONLY. READ ALL OPERATING INSTRUCTIONS BEFORE USING THIS MACHINE.**

**RE-OCCUPY TREATED ROOM ONLY AFTER PRESET OPERATING TIME HAS ELAPSED AND THE AMBER FLASHING LIGHT HAS STOPPED FLASHING INDICATING THAT THE MACHINE IS NO LONGER IN OPERATION.**

**DO NOT ATTEMPT TO ENTER THE ROOM WHILE MACHINE IS IN OPERATION; VENTILATE ROOM AFTER USE**

- ◀ **Connect** power cord to socket on Super ActivO's rear panel (bottom) and only then connect it to the power source socket.

### 6.1 Controller settings



**Æ** Press the 'STOP' (Red) button to Reset.

**O** STOP / RESET

The display will present a code followed by the alternating prompt: **Ready** and **Set Room Size**.

- Select 'Room Size' by pressing the respective keypad button.  
**Note:** You may choose between the following 4 room sizes:



**Small;** for room volumes below 30m<sup>3</sup>.



**Medium;** for room volumes between 30m<sup>3</sup> and 60m<sup>3</sup>.



**Large;** for room volumes between 60m<sup>3</sup> and 120m<sup>3</sup>.



**X-Large;** for room volumes from 120m<sup>3</sup> to 500m<sup>3</sup>

The display will now prompt: **Set Time**

**Ž** Select the **Short/Intermediate/Long** time cycle  
by pressing  
the respective button on keypad.

**Note:** Select length of cycle to  
correspond

**6**

**Short** Cycle-Time (Light odor)

**66**

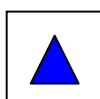
**Intermediate** Cycle-Time (Average odor)

**666**

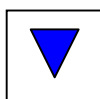
**Long** Cycle-Time (Strong odour)

- Refine Time setting (optional) by pressing the **Up** or **Down** blue-arrow  
buttons to **extend** or to **shorten** the operation cycle time,  
respectively.

Please refer to **reference chart** on page-13.



**Up** - to extend cycle-time



**Down** - to shorten cycle-time

**Note:** Time is indicated on LCD in hours and minutes.

h=hours and m=minutes.

For example 3 hours and 20 minutes would be indicated so:

3 h 20 m

- Press **green (I)** button for **START**.



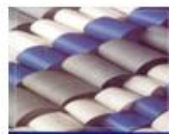
### EXAMPLES OF USE OF ITEMS CONTAINING NATURAL RUBBER

Items made of natural rubber (gum) are many and differ in their rubber content; the more rubber content, the greater their susceptibility to degradation by ozone.

Among the common items that may contain natural rubber are computer keyboards (rubber under the keys), floor squeegees, tubes (for bicycles), crepe soles (for shoes), rubber bands (various), gloves ('Latex'), smoked sheets, underlay, and more. **The common sense rule: when in doubt about whether the item contains natural rubber remove the item before treating the space. Or alternatively, smear the item's surface with Vaseline or equivalent before exposing it to ozone.**



KEYBOARD



THREADS



TUBING, LINING,  
GASKET  
E.G. OLD REFRIG  
DOORS



SQUEEGEE



NATURAL RUBBER



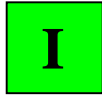
UNDERLAY



FOR SHOE SOLES



UNDERLAY



## START Operation

Place unit in CENTER of room. When treating smaller rooms you do not need to use air movers in order to circulate ozone since your Super ActivO sends ozone at a high rate of 265 CFM to the ceiling where it spreads out and drifts downward to cover all surfaces.

Note: If treating a crawl space attach 4" diameter ducting to Super ActivO Outlet (page 5). When using Super ActivO in this manner there will be no ozone deactivation. However ozone in the crawl space will deactivate naturally, typically in 3-6 hours.

The display will prompt you to '**Get Out of Room**' and the **amber "Hazard" light** will begin flashing.

### **Important!**

The system will begin generation of ozone after a **60 second** delay in order to allow you to

**' You must leave the room immediately.**  
Windows and doors

**Remaining in the treated area while unit is in operation or entering before completion of cycle may be hazardous to your health.**

should be closed to prevent ozone leakage.

' **Outside** the room you will hear a **prolonged audio alert-signal** indicating that ozone generation has begun.

" After the full operation cycle is completed including removal of the ozone, you will hear a **second audio alert-signal** indicating that **operation is completed**.

" Upon entering the treated room, the display should read:  
**Operation Complete** and the amber light should have stopped flashing.



## CAUTION

**In the event indications do not correspond to the above, leave the room immediately and call for ECOZONE service.**

- After the operation has ended and before moving the machine elsewhere,  
be sure to disconnect the power cord from the power socket.

## **ATTENTION!**

**If at any time you need to reset the keyboard settings  
press:**

**STOP button (red O) on keypad.**



## Activation, Deactivation and Total Operating Times

Generation Time = <b>G</b>
Decomposition = <b>D</b>
Total Cycle Time = <b>T</b>
<b>Inter</b> = Intermediate

	Default Short			Default Inter			Default Long		
Time (minutes)	<b>G</b>	<b>D</b>	<b>T</b>	<b>G</b>	<b>D</b>	<b>T</b>	<b>G</b>	<b>D</b>	<b>T</b>
Room Volume									
Small (<30m <sup>3</sup> )	2	11	15	25	18	45	118	60	180
Medium (<60m <sup>3</sup> )	6	22	30	34	24	60	268	90	360
Large (<120m <sup>3</sup> )	20	38	60	126	52	180	1318	120	1440
X-Large (>120m <sup>3</sup> )	178	120	300	598	120	720	2698	180	2880

## Keyboard Controlled Maximum Change From Default Time

	Up Short			Up Inter			Down Long		
Time (minutes)	<b>G</b>	<b>D</b>	<b>T</b>	<b>G</b>	<b>D</b>	<b>T</b>	<b>G</b>	<b>D</b>	<b>T</b>
Room Volume									
Small (<30m <sup>3</sup> )	17	11	30	70	18	90	28	60	90
Medium (<60m <sup>3</sup> )	21	22	45	154	24	180	88	90	180
Large (<120m <sup>3</sup> )	50	38	90	666	52	720	598	120	720
X-Large (>120m <sup>3</sup> )	238	120	360	1318	120	1440	1258	180	1440

## **5. Maintenance and Service**

Maintenance of your Super ActivO is required every 500 hours in order to insure trouble-free performance. The Super ActivO keyboard will display a message indicating that 500 hours of operation have been reached by displaying ‘**Needs Service**’.

If you have a ‘good pair of hands’ and follow these instructions carefully, this 3-step procedure should take you about 1 hour.

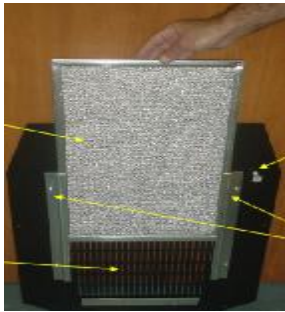
**CAUTION - DISCONNECT POWER FROM THE SUPER ACTIVO BEFORE  
BEGINNING**

**PROCEDURE BEGINS NEXT PAGE**

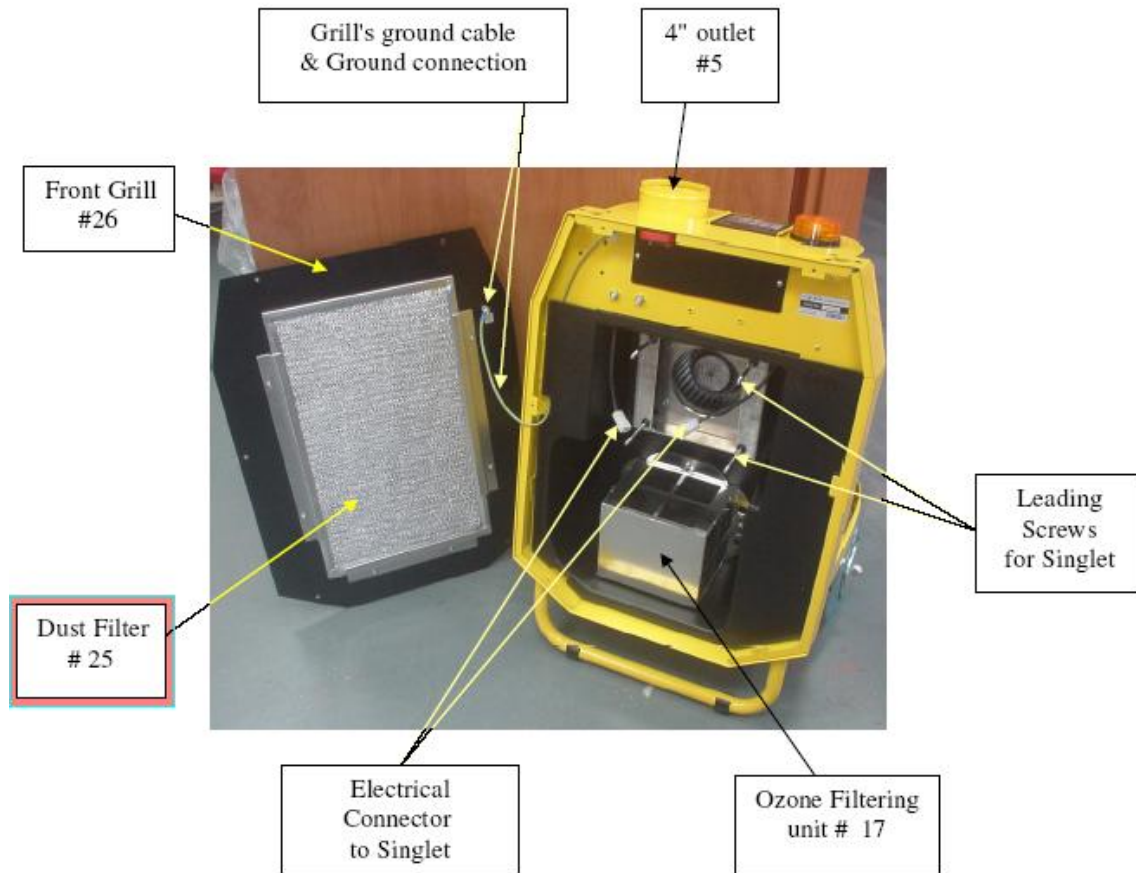
**Step 1 Clean Dust Filter (#25 in picture at bottom of this page)**

- a. Remove black front grill panel (#26) by unscrewing 6 screws. What you will then see is shown in the picture at the bottom of this page.
- b. Loosen 6 screws in frame around dust filter (#25) so you can slide filter out.

**Do not remove the earth cable connected to the grill.**

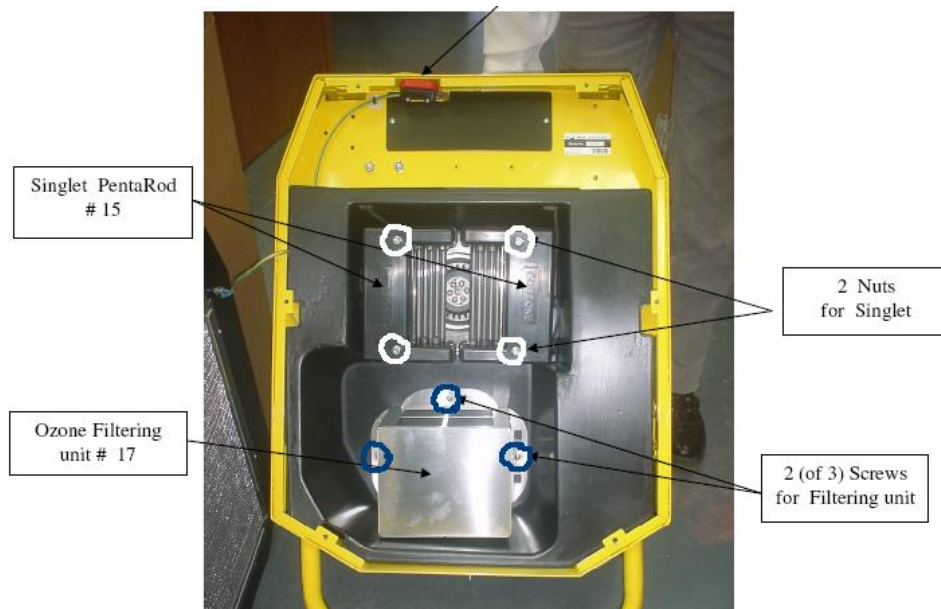


- c. Gently slide filter up and out of its frame (see picture).
- d. Place the filter under warm tap water and wash out dust. It is ok to use a mild liquid soap if needed to loosen the dust. Rinse and dry (ok to use hair dryer).
- e. Slide Dust Filter back into its frame and retighten loosened screws.



**Step 2 Clean Ozone Generating Cores (Singlets) (#15 below)**

- a. There are two (2) Singlets to remove and clean.  
They are shown side by side as #15 in this picture:

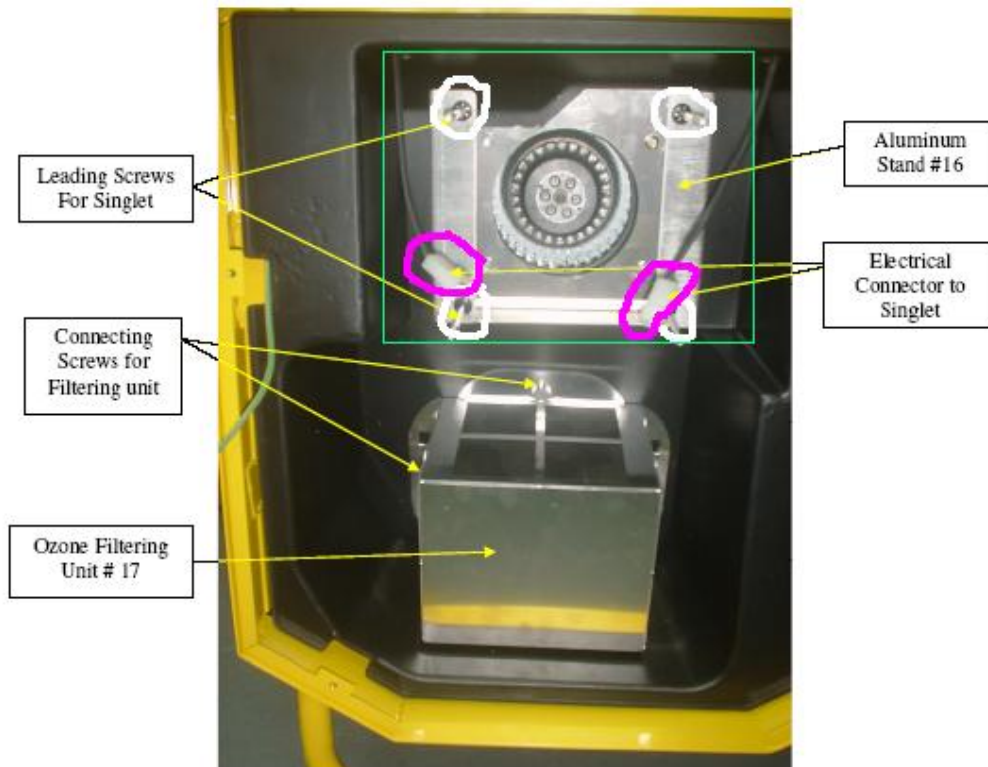


- b. Remove the electrical connector from each (purple circles, picture on next page)
- c. Unscrew the 2 nuts holding each Singlet unit (white circles above).
- d. Gently pull out in parallel each Singlet from its leading screws (exposed, in white circles in picture below, shown after removal of Singlets). **Handle unit carefully.**
- e. Clean the units under warm tap water, especially the gaps between the tubes\*.  
You may use a soft brush to remove any accumulated dirt.  
**Use care not to wet the electrical connector.**
- f. Dry the Singlet units with a soft towel.

*Continued Next Page*

\*Note: the tubes used in the Super ActivO are unlike tubes used in competitive ozone machines which are often fragile and easily broken. The Super ActivO tubes are specially designed for use in rugged DR (disaster recovery) environments.

- g. Re-mount each Singlet on its leading screws – slide in parallel. **Be sure to re-insert Singlets so that the 3 tubes are on the side facing you.**
- h. Re-attach the electrical connector to each Singlet (purple circles below)  
**Be sure the connectors are dry.**
- i. Re-screw on the two nuts to each Singlet.




**Step 3 Close black front grill panel (#26, picture above page 16)**

- a. Replace the front grill making sure the dust filter is on the inside of the unit.  
**Make sure the earth cable to the grill is completely inside the unit.**
- b. Re-screw the 6 screws around the frame of the panel.

## 6. Troubleshooting

Problem	Possible Solution
---------	-------------------

<p><i>Display is blank and keypad does not function.</i></p>	<p>Check power cord connections. Check fuse (picture below). If fuse is blown, replace it. If it blows a second time, STOP and call Ecozone for assistance.</p> 
<p><i>Display prompts "Ready" but keypad does not function.</i></p>	<p>☒ Disconnect and reconnect power cord.</p> <ul style="list-style-type: none"> <li>• Wait for "Ready" prompt.</li> </ul> <p>☒ Press STOP button (red) on keypad.</p> <ul style="list-style-type: none"> <li>• Press hard RESET button (yellow) on keypad.</li> </ul>
<p><i>Red light (fault indication) is 'ON' and the display indicates one of the following fault codes:</i></p> <p><b>a.</b> "AL: Presso-Stat"</p> <p><b>b.</b> "AL: Micro-Switch"</p>	<p>☒ Make note of fault code indicated on the display.</p> <ul style="list-style-type: none"> <li>• Disconnect power cord.</li> </ul> <p>☒ CALL ECOZONE service.</p>
<p><i>Display shows:</i> "Needs Service"</p>	<p>This notification will appear every 500 hours of use. Upon notification, please refer to Section 6 above, page 15.</p>
<p><i>Other</i></p>	<p>Call local ECOZONE distributor for technical support.</p>

## **7. Warranty**

### **WARRANTY**

ECOZONE warrants to the original retail purchaser or licensee of the Super ActivO (“**Purchaser**”) that the Super ActivO will conform to and perform in accordance with the published technical specifications and any accompanying written materials supplied by ECOZONE and will be free from defects in materials and workmanship under normal use and conditions for the applicable warranty period indicated below. This warranty does not extend to Super ActivO’s that have been subject to misuse, accident, exposure to corrosive substances, tampering or use in a manner not approved by ECOZONE in writing. The Ozone Filtering Unit (shown in the picture on page 18 as #17) is a consumable and is expressly excluded from this warranty.

**Warranty period is 1 year, commencing on the date of purchase.**

Under this warranty, Purchaser must first return the Super ActivO to ECOZONE, together with proof of purchase from an authorized dealer of ECOZONE (a “**Dealer**”), either directly, or through the Dealer from whom Purchaser purchased the Super ActivO, for examination by ECOZONE of entitlement under the terms of this warranty. All shipping, handling, travel, service call and/or other incidental and/or related charges are fully payable by Purchaser only and are not included in this warranty.

In the case of machine's fault which requires reparation that can be done by the customer on his site but must be executed, upon manufacturer's exclusive discretion, at the manufacturer's facility or in the case of manufacturer's decision to replace a machine, the customer should arrange on his account to deliver the machine to manufacturer's facility for reparation or for replacement by the manufacturer.



**THIS WARRANTY IS IN LIEU OF ANY OTHER WARRANTIES, EITHER EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ALL OF WHICH ARE EXPRESSLY EXCLUDED AND DISCLAIMED. ECOZONE WILL NOT BE LIABLE FOR LOSS OF PROFITS, ANY SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES WHICH PURCHASER MAY SUSTAIN, OR PUNITIVE DAMAGES, EVEN IN THE EVENT OF NOTICE OF THE POSSIBILITY OF SUCH DAMAGES. IN NO EVENT SHALL LIABILITY UNDER THIS WARRANTY EXCEED THE PURCHASE PRICE OF THE SUPER ACTIVO PRODUCT. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS OR THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATIONS OR EXCLUSIONS MAY NOT APPLY TO YOU. THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE.**

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